PROPOSED ADOPTION OF A "DECLARATION" CLARIFYING RULE (G) IN ARTICLE 30 IN RELATION TO THE SELECTION OF THE TYPE SPECIES OF A GENUS IN A CASE WHERE THE NOMINAL SPECIES SO SELECTED, THOUGH NOT ITSELF CITED AT THE TIME OF THE ESTABLISHMENT OF THE GENUS IN QUESTION, IS OBJECTIVELY IDENTICAL WITH ANOTHER NOMINAL SPECIES WHICH WAS SO CITED

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The present application is designed to secure through the adoption of a *Declaration* a ruling on a small point in connection with the selection under Rule (g) in Article 30 of the type species of a genus in a case where an author selects as the type species a nominal species which, though not one of the species cited at the time of the establishment of the nominal genus in question, is objectively identical with such a species.

- 2. Two cases of the kind indicated above have recently come to light in connection with the work of the Commission. One of the generic names so involved is the generic name *Homarus* Weber, 1795 (*Nomencl. ent. Fabr.*: 94). The following particulars relating to this case will illustrate clearly the nature of the problem now submitted:—
  - (1) Weber (1795) placed in the genus *Homarus* six nominal species, for one of which he cited also a named variety. The first of the nominal species so cited by Weber was *Astacus marinus* Fabricius, 1775 (Syst. Ent.: 413).
  - (2) The nominal species Astacus marinus Fabricius, 1775, was not a new species in the taxonomic sense, the name Astacus marinus being only a nom. nov. pro the name Cancer gammarus Linnaeus, 1758. The names marinus Fabricius, 1775, and gammarus Linnaeus are thus objective synonyms of one another and the nominal species bearing these names are objectively identical with one another, each being based upon the same type specimen.
  - (3) Up to 1904 the generic name Homarus was commonly attributed to Milne Edwards (H.), 1837 (Roret's Suite à Buffon, Hist. nat. Crust. 2:333). This was correct so long as Weber's earlier use of this generic name remained unknown, for Milne Edwards clearly considered Homarus to be a new genus of which he himself was the author. Milne Edwards did not however designate a type species for the genus so named.

- (4) In 1858 Desmarest (in Chenu, Ency. Hist. nat., Crust. Moll. Zooph.: 38) selected Homarus vulgaris Milne Edwards, 1837 (: 334) to be the type species of Homarus Milne Edwards. This selection is perfectly valid for Homarus Milne Edwards, to which name it was expressly related by Desmarest, but it naturally has no bearing on the question of the species to be accepted as the type species of Homarus Weber, 1795.
- (5) In 1904 (Proc. biol. Soc. Wash. 17: 170) Miss Rathbun, dealing with Weber (1795), stated that the type species of Homarus Weber was "Homarus gammarus (Linnaeus)", at the same time indicating in a footnote that she considered that this species had been so selected by Milne Edwards (1837). On this latter point Miss Rathbun was in error, since, as shown in (3) above, Milne Edwards made no reference to Homarus Weber, dealing only with his own genus Homarus Milne Edwards. However, as Miss Rathbun clearly indicated that she regarded Homarus gammarus (Linnaeus), i.e. Cancer gammarus Linnaeus, as the type species of Homarus, her action would have ranked as a valid selection by herself of the foregoing species as the type species of Homarus Weber under a decision by the Thirteenth International Congress of Zoology, Paris, 1948 (1950, Bull. zool. Nomencl. 4:181-182), if Cancer gammarus Linnaeus had been eligible for selection as the type species of this genus. But that nominal species was not one of those cited by Weber when establishing the genus Homarus. Accordingly, under the Règles as hitherto interpreted. Miss Rathbun's selection of the foregoing nominal species as the type species of *Homarus* Weber is invalid.
- (6) The first author to select one of the originally included nominal species to be the type species of Homarus Weber was, I am informed by Dr. L. B. Holthuis (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands), Fowler who in 1912 (Ann. Rep. New Jersey State Mus. 1911: 333) so selected Astacus marinus Fabricius. Fowler added that this species had been "virtually designated" as the type species of this genus by Miss Rathbun in 1904 [i.e. in the paper referred to in (5) above], when she stated that "Homarus gammarus (Linnaeus)" was the type species of Homarus Weber.
- 3. At Paris in 1948 the International Congress of Zoology, on the advice of the International Commission, was at pains to make it clear in the Règles that the only nominal species which are eligible for selection under Rule (g) in Article 30 as the type species of any given nominal genus, established prior to 1st January 1931, are nominal species which were cited by name at the time when the generic name in question was first published. The purpose of this decision was to put an end to the doubts and consequent confusion which had previously existed through the lack of a clear definition of what constitutes "an originally included species" in a genus and in consequence through the claims often advanced in the past in particular cases that a valid type selection

should be deemed to have been effected when an author selected as the type species of a genus a nominal species which had not been included therein when the generic name was first published in cases where the species so "selected" was subjectively identified by later authors with one of the nominal species originally included in the genus in question. The Congress (on the advice of the Commission) sought, when introducing the objective test of what constitutes an originally included species, to reduce to the minimum any disturbance arising from the introduction of the foregoing provision in cases where currently accepted type selections rested upon subjective identifications of the kind discussed above. For this purpose the Congress inserted a provision prescribing that the species to be accepted as being originally included species were to be not only "the nominal species cited by the original author as valid taxonomic species belonging to that nominal genus" but also "any nominal species cited on that occasion as synonyms of nominal species" treated by that author as valid taxonomic species (1950, Bull. zool. Nomencl. 4: 179—180, Decision 69(3)(a)).

- 4. At the same time that the Paris Congress took the decisions described above, it decided also with the same object in view to insert in the  $R\dot{e}gles$  a provision that, "where a subsequent author selects as the type species of a nominal genus a nominal species which is not an originally included species" as defined above "or accepts the selection of such a nominal species by a previous author and at the same time synonymises that nominal species with a nominal species which is one of the originally included species, he is to be accepted as having selected that originally included species to be the type species of the nominal genus in question "(1950, Bull. zool. Nomencl. 4:180, Decision 69(3)(b)).
- 5. The decisions taken by the International Congress of Zoology quoted in the two immediately preceding paragraphs show that, while the International Congress was determined to establish and maintain strictly objective standards for defining what constitutes an originally included species for any given nominal genus, it was anxious also to avoid imposing burdensome restrictions of a ritualistic character. It is against this background that, as it seems to me, the problem raised in the present paper should be judged. To revert for a moment to the example given in paragraph 2 above, it is quite clear that Miss Rathbun's selection of Cancer gammarus Linnaeus, 1758, as the type species of Homarus Weber, 1795, is technically defective in that the foregoing nominal species was not cited by Weber when he established the genus Homarus. On the other hand, it is true also that the foregoing nominal species is objectively identical with the nominal species Astacus marinus Fabricius, 1775, which was one of Weber's originally included species, the later published of these two names being no more than a substitute name for the older one, the two nominal species so named having in consequence the same type specimen. For all practical purposes therefore it makes no difference whatever whether the name Cancer gammarus Linnaeus, 1758, or the name Astacus marinus Fabricius, 1775, is used in any given context, for the two names represent an identical

concept. In these circumstances it seems to me that it would be unduly ritualistic to reject as invalid a type selection made under one of these names (on the ground that it was not the name cited for the species concerned by the original author of a genus) in favour of a type selection made by a later author who, when making that selection, used for the species concerned the second of the names in question, since from the taxonomic point of view the effect of each type selection is identical with that of the other and there is no possibility of confusion arising through the intrusion of any subjective judgments on the part of the authors making the type selections in question.

6. In these circumstances I submit for the consideration of the International Commission the recommendation that it should render a *Declaration* in the following terms:—

Where two or more nominal species are objectively identical with one another (the two species being based upon the same type specimen, those names being in consequence objective synonyms of one another). and where one of these nominal species is one of two or more such species included in a nominal genus established prior to 1st January 1931, a later author is to be accepted as having made a valid type selection under Rule (g) in Article 30 if he so selects any of the objectively identical nominal species in question, irrespective of whether the nominal species so selected is that which was cited by the author of the generic name at the time when he established the nominal genus so named. Example: The nominal species Astacus marinus Fabricius, 1775, is objectively identical with the nominal species Cancer gammarus Linnaeus, 1758, the name marinus being no more than a substitute name (nom. nov.) for the earlier published name. Accordingly, as Weber (1795) cited Astacus marinus Fabricius, 1775, as one of the species included in the genus Homarus Weber, 1795, the selection by a later author (Rathbun) of the objectively identical nominal species Cancer gammarus Linnaeus, 1758, as the type species of Homarus Weber, 1795, is a valid type selection for the purposes of Rule (g) in Article 30, notwithstanding the fact that that nominal species was not cited by Weber when he established the nominal genus *Homarus*.

7. The present application has been prepared in consultation with, and in agreement with, Dr. L. B. Holthuis, whom I consulted in connection with the entry on the Official List of Generic Names in Zoology relating to the generic name Homarus Weber, 1795.